Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A process for producing hydrocarbons, comprising:

contacting a feed stream comprising carbon monoxide and hydrogen with a bulk cobalt-based catalyst so as to convert at least a portion of said feed stream to hydrocarbons,

wherein the bulk cobalt-based catalyst comprises an average cobalt oxide crystallite size between 10 and 40 nm, and has a BET surface area between 10 and 150 m^2/g, and further comprises

between about ~~40~~ 48.8 and about 90 percent by weight of cobalt;

a textural promoter selected from the group consisting of zirconium, chromium, magnesium, cerium, and titanium;

optionally, a Group I metal; and

between 5 and 60 percent by weight of a binder selected from the group consisting of silica, alumina, titania, zirconia, and combinations thereof.

2. (Original) The process of claim 1 wherein the textural promoter is zirconium.

3. (Original) The process of claim 2 wherein the bulk cobalt-based catalyst comprises between about 2 and about 5 percent zirconium by weight.

4. (Original) The process of claim 1 wherein the bulk cobalt-based catalyst further comprises a Group I metal.

5. (Original) The process of claim 4 wherein the Group I metal is potassium.

6. (Original) The process according to claim 1 wherein the bulk cobalt-based catalyst has an attrition loss less than 40%.

7-16. (Canceled)

17. (Original) The process of claim 1 wherein said hydrocarbons comprise hydrocarbons with 5 or more carbon atoms.

18-42. (Canceled)

43. (Previously presented) The process according to claim 1 wherein the bulk cobalt-based catalyst has an attrition loss less than 30%.

44. (Previously presented) The process according to claim 1 wherein the bulk cobalt-based catalyst comprises a BET surface area between about 80 and about 150 square meters per gram of catalyst.

45. (Previously presented) The process according to claim 1 wherein the bulk cobalt-based catalyst comprises from about 0.1 and 10 percent by weight of the textural promoter.

46. (Previously presented) The process according to claim 1 wherein the bulk cobalt-based catalyst comprises from about 2 and about 5 percent by weight of the textural promoter.

47. (Currently amended) The process according to claim 1 wherein the bulk cobalt-based catalyst comprises between about ~~40~~ 48.8 and about 85 percent by weight of cobalt.

48. (Previously presented) The process according to claim 1 wherein the bulk cobalt-based catalyst comprises from about 10 and about 60 percent by weight of the binder.

49. (Previously presented) The process according to claim 1 wherein the binder comprises silica, alumina or combinations thereof.

50. (Previously presented) The process according to claim 1 wherein the bulk cobalt-based catalyst comprises between about 0.05 and 5 wt.% of a Group I metal.

51. (Previously presented) The process according to claim 1 wherein the bulk cobalt-based catalyst comprises between about 0.1 and about 0.2 wt. % of a Group I metal.

52. (Previously presented) The process according to claim 1 wherein the bulk cobalt-based catalyst further comprises a non-Group I Fischer-Tropsch metal selected from the group consisting of rhenium, ruthenium, platinum, palladium, boron, silver, and combinations thereof.

53. (Previously presented) The process according to claim 5 wherein the catalyst comprises between about 0.05 and 5 percent potassium by weight.

54. (Previously presented) The process according to claim 1 wherein the catalyst is disposed in a slurry bed or slurry bubble column, and comprises an average particle size between about 40 microns and about 100 microns.

55. (Previously presented) The process according to claim 1 wherein the binder in the catalyst is derived from a precursor compound of the binder and from a sol of the binder.

56. (Previously presented) The process according to claim 55 wherein the binder sol includes particles having an average size between 10 and 100 nm.

57. (Previously presented) The process according to claim 55 wherein the catalyst includes 5-15 wt. % binder derived from a binder precursor compound and 10-40 wt % binder derived from a binder sol.

58. (Previously presented) The process according to claim 55 wherein the catalyst includes 5-15 wt. % binder derived from a precursor compound of the binder and 35-50 wt. % binder derived from a binder sol.

59. (Previously presented) The process according to claim 55 wherein the binder comprises silica, and includes 5-15 wt. % silica derived from silicic acid and 35-50 wt. % silica derived from a colloidal silica sol.

60. (Previously presented) The process according to claim 55 wherein the binder comprises silica, and includes 5-15 wt. % silica derived from silicic acid and 10-20 wt. % silica derived from a colloidal silica sol.

61-66. (Canceled)

67. (Previously presented) The process according to claim 1 wherein said hydrocarbons comprise at least one product selected from the group consisting of wax, diesel fuel, kerosene, jet fuel, heating oil, and gasoline.